

TRANSPORTATION MANAGEMENT PLAN UPDATE #2

To: TODD LARK
Project Engineer
North Region Design E3
As signed by:

Date: January 28, 2019
File: HUM-101 PM 84.4/84.8
EA: 01-0E0001 EFIS: 0113000091
Upgrade Bridge Rails & Replace Bridge

From: SHERI RODRIGUEZ, Chief
District 1 Office of Traffic Operations

Project Information

Location: In Humboldt County, near Arcata, at the Jacoby Creek Bridge (#04-0023L; #04-0023R) and the Gannon Slough Bridge (#04-0024R).

Type of Work: 1. Replace the SB Jacoby Creek Bridge (#04-0023L). The new bridge will be constructed on a temporary alignment and moved to the existing alignment once the existing bridge is removed.
2. Replace bridge rails at the NB Jacoby Creek Bridge (#04-0023R) and the NB Gannon Slough Bridge (#04-0024R). Additional work includes replacing the bridge deck surfaces with reinforced concrete to support the new bridge rails.

Anticipated Traffic Control: Lane reduction traffic control on Route 101 at night
Lane reduction traffic control on NB Route 101 during the day (4 weekend occurrences max)
Short-term closure of SB Route 101 at night with detour onto Route 255 (2 occurrences; 6-hr and 10-hr closure)
SB Route 101 onramp closures
Moving lane closure for striping

Estimated Maximum Delay: NB/SB Route 101 Typical: Minimal
NB Route 101 Weekend Lane Reduction: 10 min.
SB Route 101 Detour to Route 255: 10 min.
Route 255: Minimal

Peak Hour Traffic Volumes: NB Route 101: 2,300 vph
SB Route 101: 1,800 vph
Route 255: 1,700 vph

Lane Requirement Charts Included: Yes

Closure During Night Hours: Required

Number of Working Days: 260 days; 2 seasons required at the SB Jacoby Creek Bridge (#04-0023L)

PS&E to DOE Date: February 1, 2019

RTL Date: April 1, 2019

District Traffic Mgr/ TMP Mgr: Sheri Rodriguez (707) 445-6377

TMP Contact: Jamie Lusk (707) 445-6419

Anticipated Traffic Impacts

Significant traffic impacts are not anticipated provided the following recommendations and requirements are incorporated into the project. In conformance with Deputy Directive-60, District Lane Closure Review Committee (DLCRC) approval is not required for projects with anticipated traffic delay less than 30 min. However, due to anticipated inconveniences to the public, the DLCRC was consulted and their approval was provided.

Hours of Work

- See Chart nos. 1 through 5 for work hour restrictions.
- At least two adjacent through lanes in each direction of travel must be open for use by public traffic for the following Special Days:

Event	Event Date	Special Days
Humboldt State University Graduation	Second Weekend in May	Friday through Sunday
Kinetic Grand Championship Race	Last Weekend in May	Friday through Monday
Humboldt Bay Marathon	Second Sunday in August	Sunday

The contractor must verify the actual dates for these Special Events. See Chart no. 6 “Lane Closure Restrictions for Designated Holidays and Special Days” for work day restrictions.

Public Notice

- Upon receipt of notice that the total roadway width, including paved shoulder, will be narrowed to less than 16 ft or there is a change in vertical clearance, the Resident Engineer must promptly notify the HQ District 1 Construction Liaison at (916) 322-4822 so annual permit holders can be notified of restrictions.
- The District Public Information Office, (707) 445-6444, must be contacted two weeks in advance of the start of construction.
- Each closure must be entered in the Lane Closure System (LCS; <http://lcs.dot.ca.gov/lcsprod/>).
 - To access the LCS you will need an account. Contact Jeannette Candalot at (707) 445-7807 to get set up with an account.
 - Every Monday by noon, submit a schedule of planned closures for the next week period. The next week period is defined as Friday midnight through the following Friday midnight.

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- Closures must be statused daily. Status closures before the first advance warning sign is placed (1097) and after the last advance warning sign is picked up (1098) or if cancelled (1022). Statusing can be accomplished through:

Status With	Day	Time	URL/Contact Number
LCS Web Page	Any	Any	https://lcs.dot.ca.gov
LCS Mobile Web Page	Any	Any	https://lcsmobile.dot.ca.gov
District 1 Dispatch	Monday-Friday	6:30am-6:30pm	(707) 441-5747
District 3 Dispatch	Monday-Friday	6:30pm-6:30am	(916) 859-7900
District 3 Dispatch	Saturday and Sunday	Any	(916) 859-7900

- Any emergency service agency whose ability to respond to incidents will be affected by any lane closure must be notified prior to that closure.
- Work must be coordinated with the local busing system to minimize impact on their bus schedules. A minimum of two weeks in advance of SB Route 101 being closed, contact the Humboldt Transit Authority at (707) 443-0826 regarding the Redwood Transit Authority (RTS) SB Route 101 bus route. Hours of service are approximately 6:30am-9:30pm.
- The Resident Engineer must provide information to residents and businesses before and during project work that may represent a negative impact on commerce and travel surrounding the zone of construction.

Bicyclist Accommodation

- This section of Route 101 is part of the Pacific Coast Bike Route. Bicyclists must be accommodated through the work zone. Signage must be used to alert vehicles of the possible presence of bicyclists.
 - During lane reduction traffic control, bicyclists must:
 - a) Be provided adequate space adjacent to the open traffic lane to safely traverse through the work zone (e.g. 4 ft of delineated space) or
 - b) Be safely transported through the work zone in a vehicle equipped for passengers with storage for the bicycle. Staging areas for the loading/unloading of bicycles and their equipment must be outside of the clear zone or protected with a physical barrier. The bicycle transport must ensure no damage occurs to the bicyclists' equipment. Signage must be used to direct bicycle traffic to the required staging area.

Traffic Control

- One lane closure is allowed in each direction of travel within the project limits. Additionally, SB Route 101 will be closed for portions of 2 nights (detouring traffic onto Route 255) when the new Jacoby Creek Bridge (#04-0023L) is moved from its temporary to final alignment.
- The W11-1 vehicular traffic sign (bicycle symbol) and the W16-1 supplemental plaque (SHARE THE ROAD) must be placed prior to the construction zone.
- Work that requires a lane and/or shoulder closure on a freeway or expressway must be in conformance with the Caltrans Standard Plan T10, “TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON FREEWAYS AND EXPRESSWAYS.”
 - Regarding the weekend lane reduction closures (4 occurrences) to reinforce bridge decks at the NB Jacoby Creek Bridge (#04-0023R) and the NB Gannon Slough Bridge (#04-0024R), the designer must provide a traffic handling plan.
- Work that requires a complete closure on a freeway or expressway must be in conformance with the Caltrans Standard Plan T10A, “TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON FREEWAYS AND EXPRESSWAYS.”
 - Regarding the complete SB Route 101 closures (2 occurrences) to move the new SB Jacoby Creek Bridge (#04-0023L) to its final alignment, the designer must provide a traffic handling plan or detour plan detailing the SB Route 255 detour.
- Work that requires a ramp closure must be in conformance with the Caltrans Standard Plan T14, “TRAFFIC CONTROL SYSTEM FOR RAMP CLOSURE.”
 - Advance warning signs advising the hours of closure must be required 7 days prior to the ramp closure.
 - The SB Route 101 onramps from G Street, NB Route 255 and SB Route 255 will need to be closed when SB Route 101 is closed. These ramp closures must be incorporated into the traffic handling plan or detour plan describing the SB Route 255 detour.
- Work that requires a moving lane closure on a multilane facility must be in conformance with the Caltrans Standard Plan T15, “TRAFFIC CONTROL SYSTEM FOR MOVING LANE CLOSURES ON MULTILANE HIGHWAYS.”
- A minimum of one PCMS in advance of the construction site must be required to notify the public of the closures related to this project.

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- Start displaying the message on the PCMS 15 minutes before closing the lane.
- The minimum height of the PCMS must be 7 ft.
- Access to businesses, side roads and residences must be maintained at all times. When work or traffic queues extend through an intersection, additional traffic control will be required at the intersection.
- COZEEP is required for this project based on risk factors associated with this project and the COZEEP Guidelines (CA DOT Construction Manual Section 2-215C). The associated risk factors include: workers exposed to traffic, night construction activities, end of queue management, speed management and significant truck volumes.
- An advisory speed limit sign (black on orange) and 2 radar feedback signs (located in the median and the shoulder) must be displayed/installed prior to when SB Route 101 traffic will be placed on a temporary alignment.
- The following table lists projects that are anticipated to have closures within this project's work limits and must be added to section 5-1.20A of the 2015 Standard Specifications:

Contract No.	Co-Rte-PM	Location	Type of Work	Est. Delay
01-0C9304	HUM-101-80.8/85.0	Near Arcata	Improve Drainage	TBD
01-0C9704	HUM-101-79.9/86.3	In/Near Arcata	Upgrade Guardrail	Minimal
01-0F2204	HUM-101-80.2/85.8	In/Near Arcata	Upgrade Accel/Decel Lanes	Minimal
01-366004	HUM-101-80.6/84.0	Near Arcata	Upgrade 4-Lane Facility	Minimal

TMP Elements Needed for Cost Estimate

Item Code	Item	Unit	Minimum Unit Price
066062	COZEEP Contract	LS	\$2,800/night*
066070	Maintain Traffic	LS	\$400/working day
120100	Traffic Control System	LS	\$1,600/working day
128652	Portable Changeable Message Sign	LS	\$15,000
066063	Traffic Management Plan – Public Information	LS	\$5,000

*Consult Construction for number of nights

Delay Damages

Consider deducting delay damages for each 10-minute interval (\$1,000/10-minutes) or fraction thereof past the time specified to open the following closures:

Chart no. 1 Freeway/Expressway Lane Requirements																															
County: Humboldt							Route/Direction: 101 NB/SB										PM: 84.4/84.8														
Closure limits: At the NB & SB Jacoby Creek Bridges (#04-0023) and NB Gannon Slough Bridge (#04-0024R)																															
From hour to hour							24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Thursdays							1	1	1	1	1	1															1	1	1	1	
Fridays							1	1	1	1	1	1																			
Saturdays																															
Sundays																											1	1	1	1	
<div>Legend:</div> <div><div>1</div><div>Provide at least one 16 ft through freeway/expressway lane open in direction of travel. The maximum closure length is 4,000 ft.</div></div> <div><div></div><div>No lane and/or shoulder closures allowed.</div></div>																															
REMARKS: Keep the full width of the traveled way open to traffic when no active construction activities are occurring in the traveled way or within 6 ft of the traveled way.																															

County: Humboldt			Route/Direction: 101 NB												PM: 84.4/84.8												
Closure limits: At the NB Jacoby Creek Bridge (#04-0023R) and NB Gannon Slough Bridge (#04-0024R)																											
From hour to hour			24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Thursdays			1	1	1	1	1	1																			
Fridays																							1	1	1	1	
Saturdays			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Sundays			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Legend:

1	Provide at least one 16 ft through freeway/expressway lane open in direction of travel. The maximum closure length is 4,000 ft.
	No lane and/or shoulder closures allowed.

REMARKS:

- This chart to be used when the existing AC bridge deck surface is removed and replaced with a reinforced concrete bridge deck.
- This chart is valid for 4 occurrences only.

County: Humboldt	Route/Direction: SB 101												PM: 83.9/86.2												
Closure limits:																									
From hour to hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Thursdays																									
Fridays																									C
Saturdays	C	C	C	C	C																				
Sundays																									
<p>Legend:</p> <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; width: 30px; height: 30px; margin-right: 10px;"></div> <div>Freeway/expressway may be closed completely</div> </div> <div style="display: flex; align-items: center; margin-top: 10px;"> <div style="border: 1px solid black; width: 30px; height: 30px; margin-right: 10px;"></div> <div>No complete closure is allowed</div> </div>																									
<p>REMARKS:</p> <ol style="list-style-type: none"> SB Route 101 traffic will be detoured to SB Route 255 for access to Eureka. This chart is valid during the one, 6-hr SB 101 complete closure for the Jacoby Creek Bridge (#04-0023L) trial bridge slide. It is anticipated that this closure will happen 1 week prior to the final SB 101 Jacoby Creek Bridge (#04-0023L) slide. 																									

County: Humboldt	Route/Direction: SB 101										PM: 83.9/86.2														
Closure limits:																									
From hour to hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Thursdays																									
Fridays																						C	C	C	C
Saturdays	C	C	C	C	C	C																			
Sundays																									
<p>Legend:</p> <div>C</div> Freeway/expressway may be closed completely <div></div> No complete closure is allowed																									
<p>REMARKS:</p> <p>3. SB Route 101 traffic will be detoured to SB Route 255 for access to Eureka.</p> <p>4. This chart is valid for one, 10-hr closure, when the new SB 101 Jacoby Creek Bridge (#04-0023L) is being moved from its temporary to final alignment.</p>																									

County: Humboldt	Route/Direction: 101 SB										PM: 84.975, 85.706 & 85.707														
Closure limits: SB Route 101 onramps from G Street, NB Route 255 and SB Route 255																									
From hour to hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Thursdays																									
Fridays																						C	C	C	C
Saturdays	C	C	C	C	C	C																			
Sundays																									
Legend: <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="border: 1px solid black; width: 30px; height: 20px; display: flex; align-items: center; justify-content: center; margin-right: 5px;">C</div> Ramp may be closed completely </div> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="border: 1px solid black; width: 30px; height: 20px; display: flex; align-items: center; justify-content: center; margin-right: 5px;"></div> No ramp closures allowed. </div>																									
REMARKS: 1. This chart is valid during the one, 6-hr SB 101 complete closure for the Jacoby Creek Bridge (#04-0023L) trial bridge slide and the one, 10-hr SB 101 complete closure for the Jacoby Creek Bridge (#04-0023L) final bridge slide. 2. A ramp detour plan must be approved prior to the closure of any ramps.																									

